

- *Indiana Passenger Rail Study.* Examines additional corridors in Indiana with potential for future passenger rail service. Corridors could complement the others that are proposed for development in the Midwest Initiative study (1997).
- *Gary Alternative Corridors Analysis.* Examines costs and benefits associated with the use of three different passenger rail routes between Lafayette and Chicago, each serving northwest Indiana and the Gary Airport in particular (1997).
- *South of the Lake Reroute Study.* Indiana is participating in a study, along with Michigan and Amtrak, to identify a new passenger-rail-only corridor through the highly congested area around the southern end of Lake Michigan. All eastern trains running from Chicago will benefit from decreased congestion that would result from this new corridor, because freight trains and passenger trains would not have to share heavily congested freight rail corridors (study still under way at time of this writing).
- *Northern Indiana/Northwest Ohio Routing Analysis.* A study recently begun that will examine the most cost-effective way to run trains through northern Indiana between Chicago and Cleveland. Two corridors will be studied in terms of construction costs, ridership, revenue, trip length, and other factors, while trying, if possible, to ensure that a plan is developed that will preserve good passenger rail service for all major metropolitan areas in northern Indiana (still under way at time of this writing).
- *Passenger Rail Statewide Public Communications Program.* Indiana DOT worked with a consultant to communicate information about ongoing passenger rail issues and plans and gathered input from citizens around the state (study completed in February 2002). The communications program was called the *Indiana Passenger Rail Initiative: Taking a Bold Track into a New Century*. More than 1,100 people attended public outreach meetings sponsored by Indiana DOT at seven locations during the summer and fall of 2001 to discuss the Indiana Passenger Rail Initiative. The public response was overwhelmingly in favor of INDOT's plans examining potential high-speed rail service in Indiana.

### **Intergovernmental Involvement**

- Indiana DOT is working closely with leaders at both the state and national levels on passenger rail issues as the nation considers funding sources for potential passenger rail development (ongoing).
- Applications for Section 1103(c) grade crossing financial assistance. Indiana DOT has applied for and received funds from this program, which assists with crossing improvements on designated high-speed rail corridors. INDOT last received an award for \$200,000 in 1999.
- Accelerated communications with neighboring states and local governments. Meetings with Ohio, Kentucky, and Michigan officials. Also with leaders from Indianapolis, Lafayette, South Bend, Fort Wayne, Gary, and other communities (ongoing).
- Indianapolis-to-Louisville Federal Corridor Designation Application. INDOT recently applied for (and achieved) an expansion of the Midwest Hub federally designated corridor to include a branch from Indianapolis to Louisville (2000). Indiana had previously applied for and received federal designation of the Chicago-Indianapolis-Cincinnati Corridor. Other federally designated routes are Chicago-Cleveland and Chicago-Detroit.

## **6.0 PUBLIC AND PRIVATE FINANCIAL ASSISTANCE PROGRAMS**

### **6.1 Federal Financial Assistance Programs**

Federal funding for railroad infrastructure projects are quite limited. In prior years, public funds to assist railroads in making infrastructure improvements came primarily from two sources, the Railroad Revitalization and Regulatory Reform Act (4R Act) of 1976 and the Local Rail Service Assistance

Act (LRSA). In 1998, the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) created two new Federal credit programs: The Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) and the Railroad Rehabilitation and Improvement Financing Program (RRIF). However, only limited funding has been provided under these programs in recent years as the federal government has worked out applicant and approval procedures. Section 7203 of TEA-21 amended Title V of the Railroad Revitalization and Regulatory Reform Act by replacing the railroad financing programs with new loan and loan guarantee programs. TIFIA funds were a part of the financing for the construction of the Alameda Corridor connecting the Ports of Los Angeles and Long Beach with major rail yards in the central Los Angeles region. To date, no budget submitted by the administration has included funding to support loans under the RRIF program and only three loans have been approved. Railroad funding programs, and highway funding programs that have an association with railroads, are discussed below.

### **6.1.1 Transportation Infrastructure Finance and Improvement Act (TIFIA)**

TIFIA establishes a new federal credit program for large-scale transportation projects. Credit assistance programs such as TIFIA are designed to help financial markets develop the capability to supplement the role of the federal government in helping finance the costs of large projects of national significance.

Three types of credit instruments are permitted under TIFIA: secured (direct) loans, loan guarantees, and lines of credit. To be eligible, projects must cost at least \$100 million or an amount equal to 50 percent of federal-aid highway funds apportioned to the state for the most recently completed fiscal year. (Projects mainly involved in the installation of an intelligent transportation systems [ITS] must cost at least \$30 million.) Projects must also be classified within the following categories:

- Surface transportation projects;
- International bridge or tunnel projects;
- Intercity passenger bus or rail facilities and vehicles, including those owned by Amtrak and components of magnetic levitation transportation systems; or
- Publicly owned intermodal surface freight transfer facilities, provided that the facilities are (a) located on or adjacent to the National Highway System and (b) are not seaports or airports.

Public or private applicants for credit assistance are required to submit applications to the U.S. DOT in order to be considered for approval. The U.S. DOT requires a non-refundable initiation charge for each project applying for credit assistance under TIFIA. The amount of credit assistance that may be provided to a project is limited to 33 percent of eligible project costs.

### **6.1.2 Railroad Rehabilitation and Improvement Financing Program (RRIF)**

Under this program the Secretary of the Department of Transportation may provide direct loans and loan guarantees to state and local governments, government-sponsored authorities and corporations, railroads, and joint ventures that include at least one railroad. The program has a funding limit of \$3.5 billion in aggregate unpaid balance, with \$1.0 billion reserved for non-Class I railroads. In order to be eligible, the proceeds from a direct loan or loan guarantees must be used to:

- Acquire, improve, or rehabilitate intermodal or rail equipment and facilities, including track, components of track, bridges, yards, buildings, and shops;
- Refinance outstanding debt incurred for the purposes discussed above; or
- Develop or establish new intermodal or railroad facilities.

Direct loans and loan guarantees under this program cannot be used for railroad operating expenses. In approving applications for loans or loan guarantees, priority will be given to projects that:

- Enhance public safety;
- Enhance the environment;
- Promote economic development;
- Enable United States companies to be more competitive in international markets;
- Are endorsed by the plans prepared under section 135 of title 23, United States Code, the state or states in which they are located; or
- Preserve or enhance rail or intermodal service to small communities or total areas.

### **6.1.3 Railroad Track Modernization Act of 2001**

**(Note: This legislation is pending before the U.S. Congress.)**

Legislation is currently before the U.S. Congress that is titled the Railroad Track Modernization Act of 2001 (H.R. 1020). This legislation would establish a program of direct grants to smaller (Class II and Class III) railroads for rehabilitation and improvement of tracks and related structures, including bridges, to bring the infrastructure up to a level permitting safe and efficient operation, including traffic using the new heavier, 286,000 lb. rail cars being adopted as an industry standard by the large railroads. This legislation would repeal Chapter 221 of Title 49, United States Code (Local Freight Rail Assistance).

For projects to be eligible, the track must have been operated by a Class II or Class III railroad as of the enactment date of the Railroad Track Modernization Act of 2001 and the ratio of benefits-to-costs must be more than 1.0 as calculated by a methodology to be established by the Secretary of U.S. DOT. Grants provided under this program are intended to implement track capital projects as soon as possible.

The maximum federal share would be 80 percent of the project costs. The non-federal share can be provided by any non-federal source in cash, equipment, supplies or other in-kind contributions approved by the Secretary of U.S. DOT.

## **6.2 Potential Funding Under the Federal Highway Program**

### **6.2.1 National Highway System (NHS)**

Provides funds that may be used for construction of connecting highways off the National Highway System to serve railroad freight terminals, intermodal terminals, or related railroad facilities.

### **6.2.2 Federal Highway Surface Transportation Program (STP)**

Provides funds for improvements on certain public roadways. This may include improvements at rail crossings or eliminating crossings by relocating track or constructing bridges. These funds typically pay for 80 percent of the cost, with the remaining 20 percent covered by state or local matching funds. Projects to improve crossings using these funds must compete with all other needed highway improvements.

### **6.2.3 Federal Highway (STP) Crossing Safety Program**

Provides funds for safety improvements at rail crossings on public roads. Typically pays for 90 percent or 100 percent of the cost, with the balance paid by state or local matching funds. Indiana receives about \$5 million per year in this funding category.

## **6.2.4 Federal Highway (STP) Highway Safety Program**

Provides funds for safety improvements on certain public roadways, and may include safety improvements at rail crossings. Typically pays for 90 percent or 100 percent of the cost of the work, with the balance paid by state or local funds. Projects to improve crossings using these funds must compete with all other needed highway safety improvements. Indiana typically receives about \$15 to \$20 million in these funds each year and uses about \$10 million per year for rail crossing safety work.

## **6.2.5 Railroad Crossing Warning Device Upgrades**

Indiana has an aggressive program to upgrade warning devices at rail crossings. The program currently budgets approximately \$15 million per year for this purpose. At an average cost of about \$160,000 per upgrade, this means approximately 90 crossings per year can be upgraded. About \$5 million comes from the funds described in section 6.2.3 above, and funds described in section 6.2.4 provide the other \$10 million. By federal regulation, priorities are set on a statewide basis considering relative risk and potential benefits at each crossing. This is done using federal rail crossing inventory and accident data along with federal formulas for predicting accident rates at rail crossings and estimating the benefits of each upgrade, plus diagnostic review and other relevant factors. Nearly all upgrades currently take place on local roads, since most state highway crossings already have train-activated flashing lights or gates.

## **6.2.6 Transportation Enhancement Funds**

Provides funds to preserve historic transportation infrastructure, such as rail stations and historic bridges.

# **6.3 State Financial Assistance Programs**

## **6.3.1 Industrial Rail Service Fund (IRSF)**

This is a grant and loan program to provide funding for rail infrastructure improvements, or to assist in purchasing a line threatened with abandonment. The program is aimed at providing assistance to short line railroads and port authorities (funds are not available for use by Class I railroads). The program is administered by the Rail Section of INDOT. In past years, the fund has targeted the upgrade of “excepted track” from the short line. Excepted track is the lowest track safety classification defined by the Federal Railroad Administration and denotes track that is in such poor condition that speed is limited to a maximum of 10 mph.

The fund can be used to:

- Provide loans to railroads that will be used to purchase or rehabilitate real or personal property that will be used by the railroad in providing rail transportation services.
- Pay operating expenses of the Indiana Department of Transportation, subject to appropriation by the general assembly.
- Provide \$50,000 annually to the Indiana Department of Transportation for rail planning activities.
- Provide money for the high speed rail development fund.
- Provide grants to railroads owned or operated by a port authority established under IC 8-10-5.
- Make grants to a Class II or Class III railroad for the rehabilitation of railroad infrastructure or railroad construction.

In the case of grants, limits are placed on the amount authorized in each case based on project cost, IRSF balance, and the number of anticipated applicants in any funding cycle.

The fund has been used to, among other activities, upgrade 32 percent of the short line railroad trackage from “excepted” track status to FRA Class 1.

### **6.3.2 Passive Grade Crossing Improvement Fund**

The Passive Grade Crossing Improvement Fund was instituted in 1997, and since then more than \$1.5 million in state funds have been made available to local jurisdictions and railroads to fund improvements at passive highway/rail at-grade crossings. Passive highway/rail at-grade crossings do not have automatic train activated warning devices to warn of an oncoming train. Over 2,000 passive grade crossing improvements, in 36 counties, have been implemented under the program. Types of improvements eligible include crossbucks, advance warning signs, pavement marking, overhead streetlights to illuminate a crossing, median barriers, and improvements for better sight distance.

## **6.4 Private Sector Financing and Cost Sharing**

A relatively new approach for financing transportation infrastructure projects is to share construction costs between various beneficiaries of the project. In particular, sharing between public entities and private interests is growing more common. There is no specific format or financing formulas for the organization of “Public/Private” ventures. However, use of federal funds may include required minimum levels of outside financial participation, depending upon the particular program used. The particular make-up of the parties and financial participation is determined on a case-by-case basis.

One of the largest and most complex public-private projects undertaken to date is the Alameda Corridor project linking the rail yards and ports in the Los Angeles region. The \$2.46 billion project was financed through a combination of loans and bonds and involved the Ports of Los Angeles and Long Beach and federal, state, and local transportation agencies. A key component of the construction agreement was the negotiation of user fees to be paid by the railroads. The fees are \$15 per loaded 20-foot container, \$30 per loaded 40-foot container, \$8 per empty container, and \$8 for other types of railcars. These fees will be used to pay back the loans and bonds.

Depending upon the nature of the project, private funding participants could be: affected shippers/receivers along the line, local governmental jurisdictions, franchised concessionaires (at passenger stations), and the affected railroad.

## **7.0 SAFETY TRENDS**

### **7.1 Highway/Railroad Grade Crossing Accident Trends**

The highway/railroad grade crossing safety trends presented herein were derived from the Federal Railroad Administration Office of Safety Analysis data displayed at their website (<http://safetydata.fra.dot.gov/officeofsafety/Query/Default.asp>). These data were summarized into an accident database, which could then be queried to look for trends. The following years were analyzed: 1975, 1985, 1990, 1995, 1998, 2000, and 2001.

In general, there has been a significant decrease in the number of highway/railroad grade crossing accidents during the study period. The same trend follows for the number of accidents with injuries and the number of accidents with fatalities. For example, from 1975 to 2001 accidents dropped from 660 to 147, a decrease of almost 450 percent. Similarly, accidents with injuries dropped from 155 to 44, a decrease of about 350 percent, and accidents with fatalities dropped from 55 to 17, a decrease of about 320 percent. The total number of highway/railroad grade crossing accidents, accidents with injuries, and accidents with fatalities for the study period is indicated in Table 7-1.

Although the actual number of injuries and fatalities has decreased over the years, the percentage of accidents involving an injury or fatality has increased. That is to say, the chance of having an